

**DEPARTMENT OF TRANSPORTATION
STATE OF GEORGIA**

INTERDEPARTMENT CORRESPONDENCE

FILE: NH-018-1(59) & BRN-NH-018-1(60) Paulding
P. I. Nos.: 621570 & 641830
S.R. 61 Widening and Reconstruction

OFFICE: Engineering Services

DATE: June 20, 2008

FROM: Brian Summers, P.E., Project Review Engineer *REW*

TO: Brent Story, PE, State Road and Airport Design Engineer

SUBJECT: IMPLEMENTATION OF VALUE ENGINEERING STUDY ALTERNATIVES

Recommendations for implementation of Value Engineering Study Alternatives are indicated in the table below. Incorporate alternatives recommended for implementation to the extent reasonable in the design of the project.

ALT No.	Description	Savings PW & LCC	Implement	Comments
ROADWAY (RD)				
RD-1	Increase the use of 11' lanes	\$559,413	Yes	This should be done.
RD-2	Reduce side street work on S.R. 120 Connector	\$180,007 (proposed) \$90,004 (actual)	Yes/partial	This will be reduced as much as feasible which is approximately half of what the VE Team recommended.
RD-3	Use 6' paved outside shoulders in lieu of 6.5' paved outside shoulders	\$80,916	N/A	This no longer applies since RD-4 will be implemented.
RD-4	Utilize a more consistent typical section throughout the project	63,487	Yes	This should be done.
RD-5	Re-align Campground School Road	Design Suggestion	No	The existing skew is acceptable and this VE Alternative would result in additional Right of Way and Construction costs.

ALT No.	Description	Savings PW & LCC	Implement	Comments
ROADWAY (RD) - continued				
RD-6	Re-align Dallas/Nebo Road intersection and improve it	\$293,330	No	There are a large number of vehicles making a left turn onto Dallas/Nebo from S.R. 61. The VE Alternative had this as a "Right-in/Right-out" intersection which would not accommodate the turning volumes.
RD-7	Re-align intersection of Aikin Drive	Design Suggestion	Yes	This should be done.
RD-8	Use alternate walls in lieu of Cast in Place Concrete	\$1,000,259	Yes	This should be done.
RD-9	From Sta. 90+00 to Sta. 125+00, obtain an Environmental Permit in lieu of realignment	\$5,082,800 (proposed) \$144,250 (actual)	Yes / modified	The original design would have required a PAR. The Design Office has modified the original alignment since the VE Study to avoid the need for a PAR. The actual savings shown is in Right of Way costs.
RD-10	Eliminate Aikin Ridge and Country Square Way intersections at Sta. 140+00 to Sta. 152+00±	\$229,710	Yes	This should be done.
RD-11	Reconfigure intersection at Sta. 212+00 and split intersection from One – four leg intersection to two – two leg intersection	Design Suggestion	No	This would result in additional Environmental impacts.
RD-13	Reduce turn lane storage addition on U.S. 278	Design Suggestion	Yes	This should be done.
BRIDGE (BR)				
BR-1	Use a single span bridge structure to cross trail and future track	\$510,336	No	This would require additional Temporary Shoring which was not included in the VE estimate.

ALT No.	Description	Savings PW & LCC	Implement	Comments
BRIDGE (BR) - continued				
BR-2	Construct a 10' x 12' x 100' Box Culvert in lieu of a new bridge	\$1,369,344	No YES	The Intermodal Office has recommended that a bridge be built here to accommodate a future rail line.
BR-3	Use a "One-Span" BEBO precast structure in lieu of a new bridge (trail and track)	\$494,505	No	The Intermodal Office has recommended that a bridge be built here to accommodate a future rail line.
BR-5	Use a single span structure to cross only the existing trail	\$647,245	No	The Intermodal Office has recommended that a bridge be built here to accommodate a future rail line.

A meeting was held on June 19, 2008 to discuss the above recommendations. Jim Simpson, Clay Bastian, and Walt Taylor with Road Design, and Brian Summers, Ron Wishon and Lisa Myers with Engineering Services were in attendance.

Additional information was provided by the Design Office on June 19, 2008.

The results above reflect the consensus of those in attendance and those who provided input.

Approved: 
Gerald M. Ross, P. E., Chief Engineer

Date: 7/22/08

BKS/REW

Attachments

c: Gus Shanine
R. Wayne Fedora
Todd Long
Paul Liles
Brent Story
Jim Simpson

NH-018-1(59) & BRN-NH-018-1(60) Paulding

P. I. Nos.: 621570 & 641830

VE Study Implementation

Page 4.

Clay Bastian

Paul Liles

Bill Ingalsbe

Bill DuVall

Doug Franks

James Magnus

Kenny Beckworth

Stephen Lively

Amber Perkins

Ken Werho

Nabil M. Raad

Lisa Myers



Preconstruction Status Report By PI Number

Print Date: 06/16/2008

PROJ ID	COUNTY	DESCRIPTION	MGMT. ROW DATE	SCHED DATE	MGMT. LET DATE
621570-	Paulding	SR 61 FM S OF CR 467/DALLAS NEBO RD TO SR 6/DALLAS BYPASS	Oct-08	Mar-12	Mar-10
NH000-0018-01(059)	FIELD DIST: 6				
TIP #: PA-061C1	TWIN: 641830-	US:	Phase	Approved	Proposed
MPO: Atlanta TMA	EST DATE: 11/15/2007		PE	1997	1997
MODEL YR: 2020			ROW	2009	2009
PROJ MGR: Bastian, Clay	PROJ LENGTH: 4.10		CST	2010	2010
PROG Reconstruction/Rehabili	TYPE Widening				
TYPE: tation	WORK:				
CONCEPT: ADD 4R(MED 20)	LET RESP: DOT	Congressional			11

SCHED START	SCHED FINISH	ACTIVITY	ACTUAL START	ACT/EST FINISH	PCT	DISTRICT COMMENTS
		Define Project Concept	10/28/1991	6/27/1997	100	
		Concept Meeting	12/12/1991	12/12/1991	100	
		Concept Submittal and Review	9/14/1992	9/14/1992	100	
		Receive Preconstruction Concept Approval	10/20/1992	10/20/1992	100	
		Management Concept Approval Complete	2/2/1993	2/12/1993	100	
		Revise or Re-validate Approved Concept	8/10/2004	9/2/2004	100	
6/25/2008	7/1/2008	Value Engineering Study	7/2/2007		97	
		Public Information Open House Held	11/8/2007	11/8/2007	100	
8/25/2009	8/24/2009	Environmental Approval	2/1/1997		91	
3/9/2009	3/9/2009	Public Hearing Held			0	
		Mapping	9/8/2005	10/31/2005	100	
		Field Surveys/SDE	1/3/2000	8/10/2006	100	
6/20/2008	9/11/2008	Preliminary Plans	7/1/1999		97	
6/20/2008	7/25/2008	Underground Storage Tanks	7/9/1998		99	
6/20/2008	11/6/2008	404 Permit Obtainment			0	
9/15/2009	9/16/2009	FFPR Inspection			0	
10/22/2009	1/13/2010	R/W Plans Preparation			0	
3/11/2010	3/16/2010	R/W Plans Final Approval			0	
10/22/2009	10/26/2009	L & D Report Development and Approval			0	
3/17/2010	1/25/2012	R/W Acquisition			0	
8/9/2010	8/20/2010	Stake R/W			0	
		Soil Survey	4/4/2002	7/1/2005	100	
10/27/2009	7/6/2010	Final Design			0	
7/28/2010	7/29/2010	FFPR Inspection			0	
8/12/2010	8/25/2010	FFPR Response			0	

BIKE PROVISIONS INCLUDED?: N MEASUREMENT SYSTEM: E CONSULTANT: N UT EST: \$ 426,000.00

PDD: NEED W/641830. NEED BRIDGE LAYOUTS. 10/4/01

Bridge: BRIDGE REQUIRED, SEE 641830

Design: PRELIM PLANS IN-HOUSE 9/6/07

EIS: EA/NotonSchedule/2-21-08/Phillips

LGPA: PAULDING SGN P UTIL ONLY 4/96[DALLAS SGN P UTIL ONLY 12/95]RESCISSION LETTER SENT TO DALLAS & PAULDING 5-3-05.

Prog. Develop: Project is no longer on the NHS 10-12-04.

Programming: PR2/P=11-18-96|#1 P=12-9-99|#2 6-02|#3 9-04|#4 6-07|#5 9-07|#6 5-08

Railroad: CSX (ABN)

Traffic Op: >WGW: S&M REQUESTED 4-23-08

Utility: Plans resub to utilities 3-1-07; 8 of 9 sub. to PM 6-3-08

EMG: 2129 (H85(94)-W/V88); OLD JOB #M1508/3004; DOT=M/S; C=D

R/W INFORMATION:

PREL PARCEL CT: 45 TOTAL PARCEL CT: ACQUIRED BY: DOT ACQ MGR:
UNDER-REVIEW CT: RELEASED CT: OPT-PEND CT: DEEDS CT: COND-PEND CT: COND-FILED CT:
RW CERT DT: ACQUIRED CT: RELOCATION CT:



Preconstruction Status Report By PI Number

Print Date: 06/16/2008

PROJ ID	COUNTY	DESCRIPTION	MGMT. ROW DATE	SCHED DATE	MGMT. LET DATE
641830-	Paulding	SR 61 BRIDGE OVER SILVER COMET TRAIL	Oct-08	Jun-11	Mar-10
BRNNH-0018-01(060)	FIELD DIST: 6				
TIP #: PA-061C2	TWIN: 621570-	US:	Phase	Approved	Proposed
MPO: Atlanta TMA	EST DATE: 11/15/2007		PE	1993	1993
MODEL YR: 2010			CST	2010	2010
PROJ MGR: Bastian, Clay	PROJ LENGTH: 0.03		Cost	35,000.00	
PROG: Safety	TYPE: Widening		Fund	Q10	
TYPE: BRIDGE	WORK: DOT		Status	LIC0	PRECST
CONCEPT: BRIDGE	LET RESP: DOT	Congressional		11	

SCHED START	SCHED FINISH	ACTIVITY	ACTUAL START	ACT/EST FINISH	PCT	DISTRICT COMMENTS
		Define Project Concept	11/9/2007	11/22/2007	100	
		Concept Meeting	11/22/2007	11/22/2007	100	
		Concept Submittal and Review	10/19/2007	11/22/2007	100	
		Receive Preconstruction Concept Approval	5/25/1994	5/25/1994	100	
		Management Concept Approval Complete	5/25/1994	5/25/1994	100	
6/25/2008	7/1/2008	Value Engineering Study	7/2/2007		97	
7/11/2008	7/11/2008	Public Information Open House Held			0	
		Environmental Approval	2/1/1996	7/25/1996	100	
		Public Hearing Held	1/7/2000	1/9/2000	100	
		Field Surveys/SDE	10/26/2007	11/22/2007	100	
6/20/2008	11/20/2008	Preliminary Plans			0	
6/20/2008	6/20/2008	Preliminary Bridge Design	6/23/2003		100	
6/20/2008	7/25/2008	Underground Storage Tanks			0	
6/20/2008	10/2/2008	404 Permit Obtainment			0	
12/12/2008	12/15/2008	PFPR Inspection			0	
1/20/2009	4/13/2009	R/W Plans Preparation			0	
6/9/2009	6/12/2009	R/W Plans Final Approval			0	
1/20/2009	1/22/2009	L & D Report Development and Approval			0	
6/15/2009	4/20/2011	R/W Acquisition			0	
11/2/2009	11/13/2009	Stake R/W			0	
1/20/2009	2/24/2009	Bridge Foundation Investigation			0	
1/23/2009	10/2/2009	Final Design			0	
3/25/2009	5/19/2009	Final Bridge Plans Preparation			0	
10/26/2009	10/27/2009	FFPR Inspection			0	
11/10/2009	11/23/2009	FFPR Response			0	

BIKE PROVISIONS INCLUDED?: N MEASUREMENT SYSTEM: E CONSULTANT: C UT EST: \$ 0.00

PDD: NEED DOT TO BUY RW = 02. w/rdwy proj 621570.
Bridge: IAB 05/02/08
Design: NEW BRIDGE OVER SILVER COMET| NH-018-1(59) 621570
EIS: EA/NotonSchedule/2-21-08/Phillips
LGPA: PAULDING REF ROW & SGN PUBLIC UTIL 1-8-02|RESCISSION LETTER SENT TO PAULDING 6-3-05.
Prog. Develop: Project is no longer on the NHS 10-12-04.
Programming: PR2/PE=3-12-93...NB CHANGE APRIL '94 DE/1595--NO \$'S FOR INC#1 1-05
Railroad: CSX(ABN)
Traffic Op: SEND PLANS FOR REVIEW WHEN PFPR SET| 1-19-07 S+*
Utility: Plans resubmitted to utilities 3-1-07
EMG: SAFETY (NEW BRIDGE WIDENING); SURVEY BY DIST. 7

R/W INFORMATION:

PREL PARCEL CT: 6 TOTAL PARCEL CT: ACQUIRED BY: LOC ACQ MGR:
UNDER-REVIEW CT: RELEASED CT: OPT-PEND CT: DEEDS CT: COND-PEND CT: COND-FILED CT:
RW CERT DT: ACQUIRED CT: RELOCATION CT:

Wishon, Ron

From: Taylor, Walter
Sent: Thursday, June 19, 2008 2:14 PM
To: Myers, Lisa
Cc: Bastian, Clay; Simpson, Jim; Summers, Brian; Wishon, Ron
Subject: NH000-0018-01(059) PI 621570 SR 61 Paulding County - VE Study Final Report
Attachments: 2010-2030 traffic 1_4 ADT.pdf; 2010-2030 traffic 3_4 DHV.pdf; 621570CV01.pdf; 621570 Alt.1(urban).doc; 621570 Alt.2(urban).doc

Lisa,

Attached are the items requested from the VE implementation meeting on the above project. I've included the ADT and DHV for SR 61 @ Dallas Nebo Road, the project cover sheet, and the ROW cost estimate for both alternates. For the ROW cost estimates, alternate 1 is where the alignment stays on the existing roadway and we have to go through the PAR process. Alternate 2 is where we redesign the road and avoid the need for a PAR. As you can see alternate 2 is the lower of the two estimates and it saves time/money because we don't have to have a PAR. Let me know if you need anything else.

Thanks,

Walter D. Taylor, P.E.

Assistant Design Group Manager
Georgia Department of Transportation
Office of Road Design
Phone: (404) 631-1617
Fax: (404) 631-1949
Email: wtaylor@dot.ga.gov

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Preliminary Right of Way Cost Estimate

Phil Copeland
Right of Way Administrator
By: Jerry Milligan

Date: April 22, 2008 **UPDATE**
Project: NH000-0018-01(059)Paulding Alternate #1 (All Urban)
Existing/Required R/W: Varies/Varies
Project Termini : SR 61 Widening Alternate # 1 (All Urban)
Project Description: SR 61 Widening Project

P.I. Number: 621570
No. Parcels: 190

Land:

Commercial R/W: 4.57 acres @ \$ 80,000/acre	\$ 365,760	
Residential R/W: 41.15 acres @ \$ 16,500/acre	<u>678,975</u>	\$ 1,044,735

Improvements : Residences, Buildings, fencing, landscaping, misc. site improvements		3,375,000
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Relocation: Commercial (3)	\$ 75,000	
Residential (16)	<u>640,000</u>	715,000

Damage : Proximity (36)	\$ 640,000	
Consequential (0)		
Cost to Cure (5)	<u>125,000</u>	<u>765,000</u>

Net Cost		\$ 5,899,735
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Net Cost		\$ 5,899,735
Scheduling Contingency 55 %		3,244,854
Adm/Court Cost 60 %		<u>5,486,753</u>
		\$ 14,631,342

Total Cost **\$14,631,350**

Note: The Market Appreciation (40%) is not included in the updated Preliminary Cost Estimate.

Note: This update is based upon estimate by consultant dated July 26, 2007.

Preliminary Right of Way Cost Estimate

Phil Copeland
Right of Way Administrator
 By: Jerry Milligan

Date: April 22, 2008 **UPDATE**
Project: NH000-0018-01(059)Paulding Alternate #2 (Urban)
Existing/Required R/W: Varies/Varies
Project Termini : SR 61 Widening Alternate # 1 (Urban)
Project Description: SR 61 Widening Project

P.I. Number: 621570
No. Parcels: 190

Land:

Commercial R/W: 4.95 acres @ \$ 80,000/acre	\$ 396,160	
Residential R/W: 44.57 acres @ \$ 16,500/acre	<u>735,405</u>	\$ 1,131,565

Improvements : Residences, Buildings, fencing, landscaping, misc. site improvements		3,225,000
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Relocation: Commercial (3)	\$ 75,000	
Residential (15)	<u>600,000</u>	675,000

Damage : Proximity (39)	\$ 685,000	
Consequential (0)		
Cost to Cure (5)	<u>125,000</u>	<u>810,000</u>

Net Cost		\$ 5,841,565
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Net Cost		\$ 5,841,565
Scheduling Contingency 55 %		3,212,860
Adm/Court Cost 60 %		<u>5,432,655</u>
		\$ 14,487,080

Total Cost **\$14,487,100**

Note: The Market Appreciation (40%) is not included in the updated Preliminary Cost Estimate.

Note: This update is based upon estimate by consultant dated July 26, 2007.

**DEPARTMENT OF TRANSPORTATION
STATE OF GEORGIA**



INTERDEPARTMENT CORRESPONDENCE

FILE NH000-0018-01(059) Paulding County
PI No.: 621570
SR 61 Widening and Reconstruction

OFFICE Road Design

DATE May 23, 2008

FROM  Brent Story, P.E., State Road and Airport Design Engineer

TO Brian Summers, P.E., Project Review Engineer
Attention: Lisa Myers

SUBJECT VALUE ENGINEERING STUDY – FINAL REPORT RESPONSE

Below are the responses to the Value Engineering Study conducted on November 13-16, 2007, for the above referenced project. Each comment was studied and addressed by the Department's Project Manager.

ALTERNATIVE NUMBER RD-1:

Increase the use of 11' travel lanes.

COMMENTS:

This alternate is recommended for implementation.

ALTERNATIVE NUMBER RD-2:

Reduce side street work on SR 120 connector.

COMMENTS:

As designed, GDOT Design Policy Manual criteria are met. The length of construction on each side of the intersection is due to taper lengths required to create sufficient width for the intersection. Implementation of this alternate as presented is not recommended.

ALTERNATIVE NUMBER RD-3:

Use 6'0" paved outside shoulder in-lieu of 6'6" paved outside shoulder.

COMMENTS:

Where rural shoulders are used, due to drainage, the standard 6'-6" shoulder pavement will be used. This alternate does not meet GDOT Design policy Manual criteria. Implementation of this alternate is not recommended.

ALTERNATIVE NUMBER RD-4:

Utilize more consistent typical section throughout the project.

COMMENTS:

This alternative is recommended for implementation, with limitations due to drainage design. Both rural and urban shoulders may be utilized. Sidewalk can be constructed behind ditches as needed.

ALTERNATIVE NUMBER RD-5:

Re-align Campground School Road (Design Suggestion).

COMMENTS:

As designed the skew angle is acceptable. Radii and pavement markings control the operation. Additional construction and right of way costs would be encountered, if this alternative were implemented. Therefore this design suggestion is not recommended for implementation.

ALTERNATIVE NUMBER RD-6:

Retain Dallas/ Nebo Road intersection and improve it.

COMMENTS:

Existing skew is 43 degree, high volume of traffic, strong need to improve geometry. This alternative would reconstruct the intersection as right in/ right out. Traffic analysis indicates dual lefts from SR 61 onto Dallas/ Nebo Rd. and left turns from Dallas/Nebo onto SR 61 are required. This alternative is not recommended for implementation.

ALTERNATIVE NUMBER RD-7:

Re-align intersection at Akin Drive (Design Suggestion).

COMMENTS:

This design suggestion is recommended for implementation.

ALTERNATIVE NUMBER RD-8:

Use alternate wall in-lieu of Cast In Place.

COMMENTS:

Type of wall will be determined based on length, height, constructability and cost.

ALTERNATIVE NUMBER RD-9:

Sta. 90+00 to Sta. 125+00; Obtain environmental permit in-lieu of realignment.

COMMENTS:

This alternative is not recommended for implementation. Road Design has re-designed the realignment to lessen impacts and reduce right of way costs.

ALTERNATIVE NUMBER RD-10:

Eliminate Akin Ridge and Country Square Way intersections at Sta. 140+00 to Sta. 152+00 +/-.

COMMENTS:

This alternate will be a savings in construction time and cost and control ingress and egress at a single location. The implementation of this alternate is recommended.

ALTERNATIVE NUMBER RD-11:

Reconfigure intersection at 212+00 split intersection from 1-4 leg to 2-2 leg (Design Suggestion).

COMMENTS:

The implementation of this design suggestion is not recommended due to potential additional environmental impacts.

ALTERNATIVE NUMBER RD-13:

Reduce turn lane storage addition on 278 (Design Suggestion).

COMMENTS:

This design suggestion is recommended for implementation.

ALTERNATIVE NUMBER BR-1:

Use single span bridge structure to cross trail and future track.

COMMENTS:

The proposed alternative would reduce the existing cross section opening along the Silver Comet Trail. The proposed alternative would require more temporary shoring than the original design because the existing bridge structure is 135-ft long. The implementation of this alternate is not recommended.

ALTERNATIVE NUMBER BR-2:

Construct 10'x12'x100' Box Culvert in-lieu of a new bridge.

COMMENTS:

The proposed alternative would not provide the required 23-ft minimum vertical clearance over future railroad tracks. The implementation of this alternate is not recommended.

ALTERNATIVE NUMBER BR-3:

Use a "One-Span" BEBO precast structure in-lieu of a new bridge (trail and track).

COMMENTS:

The elevation drawing of the BEBO bridge structure supplied with the VE report was not drawn to scale and it appeared to be a generic elevation drawing for many different size BEBO structures. The VE report elevation drawing was enlarged and checked for vertical and horizontal clearances, but the drawing was not accurate to any scale. The required minimum vertical and horizontal clearance for 2 future railroad tracks does not appear to be present in the drawing provided. The proposed alternative would require more temporary shoring than the original design because the existing bridge structure is 135-ft long. The implementation of this alternate is not recommended.

ALTERNATIVE NUMBER BR-5:

Use a single span bridge structure to cross only the existing trail.

COMMENTS:

The proposed alternative would not provide for 2 future railroad tracks. The proposed alternative would reduce the existing cross section opening along the Silver Comet Trail. The proposed alternative would require more temporary shoring than the original design because the existing bridge structure is 135-ft long. The implementation of this alternate is not recommended.

Please contact Clay Bastian or Walt Taylor at (404) 656-5400 for any additional information or comments you may have.

BAS:CCB:WDT